On-Site Technical Checklist – Master Consolidated Version (Essential Electrical Report Field Data Standard)

Purpose: To collect verifiable on-site data required for the preparation of an Essential Electrical Report.
Intended Users: Licensed Electricians / Technicians / Technical Assistants

Core Principles:

✓ Observe, measure, and record only

✗ No judgement, no recommendations, no quotations, no risk explanation

✓ All data must be verifiable (photos / instruments)

SECTION 1 | Property Information & Environment (Mandatory)

Address:

Property Type: ☐ Detached ☐ Townhouse ☐ Apartment ☐ Unit ☐ Commercial

Approx. Year Built: ☐ <1990 ☐ 1990–2005 ☐ >2005

Occupancy Status: ☐ Owner-occupied ☐ Rental ☐ Vacant

Special Occupants: ☐ None ☐ Seniors ☐ Children ☐ Disability

SECTION 2 | Supply & Distribution – Visual Inspection (Mandatory)

Supply Overview

Supply Type: ☐ Single-phase ☐ Two-phase ☐ Three-phase

Nominal Supply Voltage Displayed: ☐ 230 / 400 V ☐ Not labelled

Meter Type: ☐ Accumulation (Ferraris) ☐ Digital / Smart ☐ Mixed / Unclear

Consumer's Main Service Type: ☐ Overhead ☐ Over-under ☐ Underground pit

Service Fuse Location: ☐ Eave ☐ Stubby pole ☐ Meter box ☐ Service pit

Main Switch & Incoming Supply

Normal Supply Main Switch Present: ☐ Yes ☐ No

Main Switch Rating: ____ A
Number of Main Switches: ____

Main Switch Type: ☐ Isolator ☐ Circuit breaker ☐ Old knife / rotary

Service Fuse Rating (if visible): ____ A

Service Fuse Type: ☐ Ceramic rewireable ☐ Cartridge ☐ Not accessible

Signs of Overheating: ☐ No ☐ Yes (photo required)

Discolouration / Melted Plastic: ☐ No ☐ Yes

Enclosure, Backboard & Materials

Switchboard Location: ☐ Indoor ☐ Outdoor

Enclosure Condition: ☐ Intact ☐ Cracked ☐ Broken / missing cover

IP Rating Marked: ☐ Yes ☐ No

Signs of Water Ingress: ☐ No ☐ Yes

Dust / Insect / Spider Contamination: ☐ No ☐ Yes

Backboard Material: ☐ Timber ☐ Plastic ☐ Cement sheet ☐ Metal

Asbestos Suspected: ☐ Yes ☐ No ☐ Unsure (treat as asbestos)

Protection Devices & Capacity

RCDs Present: ☐ Yes ☐ No

RCD Type: ☐ Type A ☐ Type AC ☐ Unknown

RCBOs Installed: ☐ Yes ☐ No

Any Circuits Without RCD Protection: ☐ Yes ☐ No

Spare Ways Available: ☐ Yes (____ ways) ☐ No

Switchboard Appears At Capacity: ☐ Yes ☐ No ☐ Unsure

Earthing & MEN System

MEN Link Visible: ☐ Yes ☐ No

MEN Accessible: ☐ Yes ☐ No

Main Earth Conductor Present: ☐ Yes ☐ No

Main Earth Conductor Size Appears Adequate: ☐ Yes ☐ No ☐ Unsure

Bare Earth in Use: ☐ Yes ☐ No

Earth Bar Present: ☐ Yes ☐ No

Neutral Bar Present: ☐ Yes ☐ No

Earth & Neutral Mixed Downstream: ☐ Yes ☐ No

Cables, Entries & Legacy Items

Supply Cable Condition: ☐ Good ☐ Aged ☐ Damaged

Cracked / Brittle Insulation: ☐ No ☐ Yes

Unprotected Cable Entries (no grommet): ☐ No ☐ Yes

Exposed Single Insulated Conductors: ☐ No ☐ Yes

Incorrect Colour Identification: ☐ No ☐ Yes

Ceramic Fuse Holders Present: ☐ Yes ☐ No

Rewireable Fuses Present: ☐ Yes ☐ No

Signs of DIY Modifications: ☐ No ☐ Yes

Non-standard / Unknown Breakers: ☐ No ☐ Yes

Mixed Old & New Devices: ☐ No ☐ Yes

Operational Indicators

Signs of Overheating Anywhere in Board: ☐ No ☐ Yes

Burn Marks / Carbon Tracking: ☐ No ☐ Yes

Grease / Oil Contamination: ☐ No ☐ Yes

Loose Components Visible: ☐ No ☐ Yes

Photo Record Requirements

☐ Overall switchboard

☐ Main switch & service fuse

☐ MEN link

☐ Damage / corrosion / overheating

☐ Asbestos suspected backboard

SECTION 3 | Internal Installation – Visual Inspection (Mandatory)

Instruction to Technician:
- Record only what is visible or directly observable
- Do NOT assess safety, compliance, or risk
- Do NOT interpret standards
- If a condition exists, tick it and take a photo
- If unsure, mark 'Unable to confirm'

3.1 Power Points (All Areas)

☐ Power point present (Number)----

☐ Power point moves when lightly touched (Number)

☐ Cracks visible on faceplate (Number)

☐ Burn marks visible (Number)

☐ Plug disengages under its own weight (Number)

☐ Switch movement uneven or obstructed (Number)

☐ Earth pin missing or damaged (if applicable)

☐ Surface feels abnormally warm to touch (photograph item)

☐ Horizontal distance from power point edge to sink/tap edge measured: ____ mm

☐ Extension lead connected at time of inspection

☐ Unable to confirm

3.2 Lighting & Switches

☐ Switch plate cracked or damaged

☐ Switch body moves when touched

☐ Unusual audible sound heard during operation (e.g., buzz, crackle)

☐ Light fitting moves when lightly touched

☐ Heat damage visible on fitting or ceiling

☐ Lamp type observed: ☐ LED ☐ Halogen ☐ Incandescent

☐ Bare metal wire core is visible (photograph)

☐ Unable to confirm

3.3 Kitchen – Fixed Installations

☐ Oven present

☐ Cooktop present

☐ Dishwasher present

☐ Dedicated outlet or isolator visible

☐ Supply cable located within ____ mm of cooktop surface

☐ Number of power points above bench: ____

☐ Horizontal distance from power point to sink edge: ____ mm

☐ Range hood present

☐ Grease residue observed on rangehood filter/cover (photograph)

☐ Unable to confirm

3.4 Bathrooms & Damp Areas

☐ Power point present in bathroom

☐ Light fitting present above bath/shower

☐ Exhaust fan present

☐ Heated towel rail present

☐ Moisture staining visible (photo reference)

☐ Unable to confirm

3.5 Laundry

☐ Washing machine outlet present

☐ Dryer outlet present

☐ Outlet height above finished floor: ____ mm

☐ Water tap present within ____ mm of outlet

☐ Extension lead connected at time of inspection

☐ Unable to confirm

3.6 Roof Space / Ceiling

☐ Roof space accessed

☐ Cable support method observed: clips / resting / buried

☐ Insulation contact observed

☐ Cable with non-modern (non-PVC) insulation observed (photograph)

☐ Taped connection (non-box) visible (photograph)

☐ Transformer present

☐ Transformer resting on insulation

☐ Not accessed (reason recorded)

3.7 Exterior & Garage

☐ Outdoor power point present

☐ Weatherproof cover present

☐ Cover broken or missing

☐ Exterior light present

☐ Garage door opener present

☐ Flexible lead fixed in place with clips/screws

☐ Unable to confirm

3.8 Smoke Alarms

☐ Smoke alarm present

☐ Location photographed

☐ Type observed: photoelectric / ionisation / unknown

☐ Unit tested as interconnected (pressing test button on one activates others)

☐ Test button pressed

☐ Alarm sounded

☐ Manufacture date recorded: ____

☐ Power source observed: mains / battery / both

☐ Unable to confirm

3.9 General Observations

☐ Ceramic fuse holder visible

☐ Bakelite or ceramic accessory visible

☐ Non-standard wiring or added component observed (photograph)

☐ Number of power boards observed: ____

☐ Cable damage visible

☐ Unable to confirm

SECTION 4 | Renewable, Storage & High-Load Electrical Systems

Solar PV System

Installed: ☐ Yes ☐ No

Inverter Rated Capacity: ____ kW

Inverter Location: ☐ Garage ☐ Outdoor ☐ Roof space

Inverter has any alarm on the screen: ☐ Yes ☐ No

Main PV Isolator Present: ☐ Yes ☐ No

DC Isolator marked “DC”: ☐ Yes ☐ No

Roof Isolator Present: ☐ Yes ☐ No

Battery Energy Storage System (ESS)

Installed: ☐ Yes ☐ No

Battery/inverter nameplate photographed
Battery Capacity: ____ kWh
Continuous Output: ____ kW

Isolator Present: ☐ Yes ☐ No

Signs of Heat / Swelling / Odour: ☐ No ☐ Yes

EV Charging Equipment

Installed: ☐ Yes ☐ No

Charger Type: ☐ Wall-mounted ☐ Portable

Rated Current: ____ A
Rated Power: ____ kW

Dedicated Circuit: ☐ Yes ☐ No

Local Isolator Present: ☐ Yes ☐ No

Swimming Pool / Spa Equipment

Installed: ☐ Yes ☐ No

Pump Motor Rated Power: ____ kW
Pool Heater Rated Power: ____ kW

Dedicated Circuit Identified: ☐ Yes ☐ No

RCD Protection Indicated: ☐ Yes ☐ No

Other High Load Equipment (Mandatory)

Electric Cooktop Rated Power: ____ kW (☐ Single-phase ☐ Three-phase)

Hot Water System Type: ☐ Storage ☐ Instantaneous

Hot Water System Rated Power: ____ kW

Air-Conditioning Type: ☐ Split ☐ Ducted

Air-Conditioning Electrical Input: ____ kW

Dedicated Circuit(s): ☐ Yes ☐ No

SECTION 5 | Measured & Test Data (Mandatory / Conditional)

Supply Voltage (No Load → Load):
L1: ____ V → ____ V L2: ____ V → ____ V L3: ____ V → ____ V

Load Current (Clamp Meter):
L1: ____ A L2: ____ A L3: ____ A Neutral: ____ A

Earth Resistance: ____ Ω Test Method: ☐ Clamp ☐ 3 pole

MEN Continuity: ☐ Pass ☐ Fail Main Earthing Conductor Size: ____ mm^2

Thermal Imaging:
Ambient Temp: ____ °C Max Main Switch Temp: ____ °C ΔT: ____ °C

Insulation Resistance / Continuity / Voltage Drop – if applicable (record values only)

SECTION 6 | Exceptions, Client Statements & Completion

Observed Exceptions (describe only):

_____

Client Statements (verbatim):
Previous issues: _____
Client concerns: _____

Completion Confirmation:

☐ All checklist items completed

☐ All required photos uploaded

☐ No advice or quotations provided

Technician Name & Signature: _____
Date: ____ / ____ / ____